

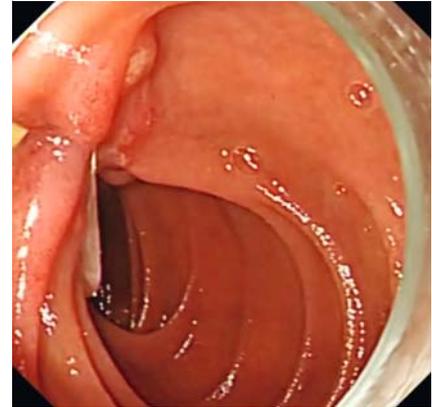
## Endoscopic removal of dental prosthesis impacted in the duodenal papilla



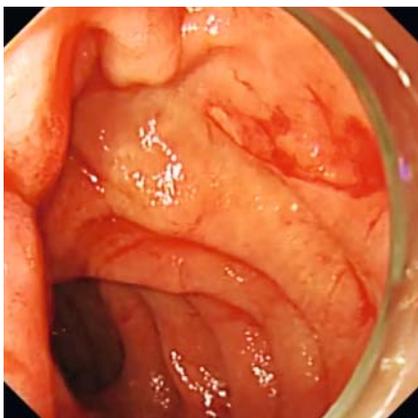
► **Fig. 1** Abdominal radiograph showed densification in the right middle abdomen.



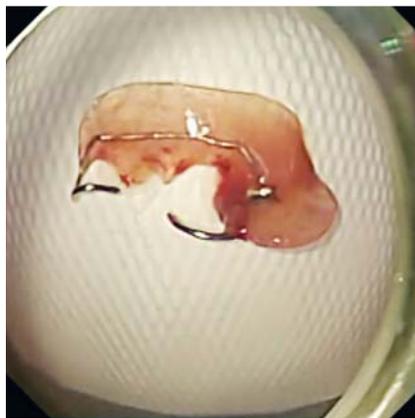
► **Fig. 2** Abdominal computed tomography scan showed the swallowed dental prosthesis in the descending segment of the duodenum.



► **Fig. 3** An endoscopic examination confirmed the presence of the prosthesis in the duodenal papilla.



► **Fig. 4** The duodenal papilla was checked to ensure no complications had occurred.



► **Fig. 5** The removed dental prosthesis.

A 69-year-old man with a history of Alzheimer's disease was admitted to the emergency department 27 hours after ingesting his dental prosthesis. The patient's main complaints were dysphagia, epigastric pain, bilious vomiting, and severe nausea.

Palpation revealed no pathological findings, the leucocyte count was normal, and there was only a slight elevation in C-reactive protein. The physical examination did not reveal pneumoperito-

neum. Abdominal radiograph showed an irregular densification in the right middle abdomen (► **Fig. 1**). Abdominal computed tomography scan confirmed the presence of the prosthesis in the descending segment of the duodenum (► **Fig. 2**). A video-assisted endoscopy was performed to remove the foreign body (► **Fig. 3**, ► **Video 1**).

First, the dental prosthesis was removed from the duodenal papilla. Then, a condom was used to contain the prosthesis, which was extracted successfully and without causing any esophageal injury

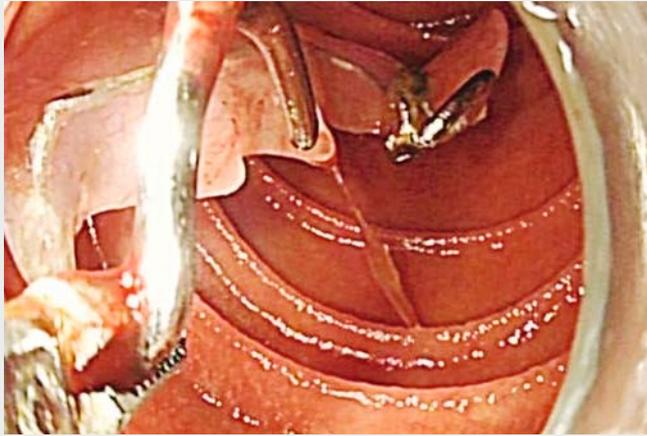
(► **Fig. 4**, ► **Fig. 5**). The procedure was performed smoothly and there were no complications after endoscopic treatment.

Dental prostheses and small orthodontic appliances account for the majority (73%) of accidental sharp ingestion in normal adults [1]. As surgery in the duodenum is difficult and carries high mortality and morbidity risks, endoscopic removal of the foreign body is recommended as the initial choice of treatment because it is less invasive [2]. Endoscopy should be the first choice for patients in whom a foreign object is demonstrated to be fixed in the duodenal papilla. Furthermore, use of a condom through the endoscope remains the safest therapeutic approach when the foreign body carries a high risk of perforation.

Endoscopy\_UCTN\_Code\_CCL\_1AB\_2AF

### Acknowledgment

The authors want to thank Sichuan Province Science and Technology Department (China) (2017SZ0009) for their support.



**Video 1** Dental prosthesis was found to be fixed in the duodenal papilla and it was removed successfully by endoscopy.

### Competing interests

None

### The authors

**Meiduo Ouzhu<sup>1,\*</sup>, Chuncheng Wu<sup>2,\*</sup>, Liansong Ye<sup>2</sup>, Jigme Dawa<sup>1</sup>, Bing Hu<sup>2</sup>**

1 Department of Gastroenterology, Tibet Autonomous Region People's Hospital, Lhasa, China

2 Department of Gastroenterology, West China Hospital, Sichuan University, Chengdu, China

\* These authors contributed equally to this work.

### Corresponding author

**Bing Hu, MD**

Department of Gastroenterology, West China Hospital, Sichuan University, No. 37 Guo Xue Alley, Chengdu 610041, Sichuan Province, China

Fax: +86-28-85423387  
hubingnj@163.com

### References

- [1] Rodríguezhermosa JI, Codinacazador A, Sirvent JM et al. Surgically treated perforations of the gastrointestinal tract caused by ingested foreign bodies. *Colorectal Dis* 2008; 10: 701–707
- [2] Ikenberry SO, Jue TL. ASGE Standards of Practice Committee. et al. Management of ingested foreign bodies and food impactions. *Gastrointest Endosc* 2011; 73: 1085–1091

### Bibliography

DOI <https://doi.org/10.1055/a-0756-7236>

Published online: 7.11.2018

*Endoscopy* 2019; 51: E10–E11

© Georg Thieme Verlag KG

Stuttgart · New York

ISSN 0013-726X

### ENDOSCOPY E-VIDEOS

<https://eref.thieme.de/e-videos>



*Endoscopy E-Videos* is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at <https://mc.manuscriptcentral.com/e-videos>